Amendments to the Specification

Please delete the paragraph beginning on page 3, line 16.

Please delete the paragraph beginning on page 3, line 21.

Please delete the paragraph beginning on page 3, line 25.

Please delete the paragraph beginning on page 4, line 1.

Please delete the paragraph beginning on page 4, line 4.

Please replace the paragraph beginning on page 4, line 11 with the following amended paragraph:

In a first aspect of the invention, there is a spray booth having walls and a ceiling extending therebetween, and has lighting apparatus including at least a first lighting assembly and a second lighting assembly. The first and second lighting assemblies are located adjacent the ceiling and spaced inwardly of the walls. The lighting assemblies are convergently oriented. The ~~In still yet another feature, the~~ walls include a first wall running more closely adjacent to the first lighting assembly than any other wall, and an opposed wall running more closely adjacent to the second lighting assembly than any other wall. The spray booth has a ventilation system that includes venting mounted between the first lighting assembly and the first wall. In another feature, the ventilation system includes venting mounted between the second lighting assembly and the second wall. In still another feature, the ventilation system includes venting mounted between the first and second lighting assemblies. ~~In yet another feature, the ventilation system~~

~~includes venting mounted between the first and second lighting assemblies.~~

Please replace the paragraph beginning on page 4, line 25 with the following amended paragraph:

In another aspect of the invention, there is a spray booth having walls and a ceiling extending therebetween, and has lighting apparatus including at least a first lighting assembly and a second lighting assembly. The first and second lighting assemblies are located adjacent the ceiling and spaced inwardly of the walls. The lighting assemblies are convergently oriented. The ~~still yet a further feature, the~~ walls include a first wall running more closely adjacent to the first lighting assembly than any other wall, and an opposed wall running more closely adjacent to the second lighting assembly than any other wall. The spray booth has a ventilation system that includes inlet venting mounted between the first lighting assembly and the first wall, between the second lighting assembly and the second wall, and between the first lighting assembly and the second lighting assembly, and exhaust venting is mounted distant from the ceiling.

Please replace the paragraph beginning on page 5, line 3 with the following two amended paragraphs (which consist of the aforementioned paragraph amended and separated into two paragraphs):

In a further aspect of the invention, there is a spray booth having walls and a ceiling extending therebetween, and has lighting apparatus including at least a first lighting assembly and a second lighting assembly. The first and second lighting assemblies are located adjacent the ceiling and spaced inwardly

of the walls. The lighting assemblies are convergently oriented. ~~another feature, the~~ The spray booth has a ventilation system operable to urge overspray away from the lighting system.

In a still further aspect of the invention, there is a spray booth having walls and a ceiling extending therebetween, and has lighting apparatus including at least a first lighting assembly and a second lighting assembly. The first and second lighting assemblies are located adjacent the ceiling and spaced inwardly of the walls. The lighting assemblies are convergently oriented. ~~In still another feature, the~~ The spray booth has a ventilation system that includes inlet vents mounted in a straddling arrangement relative to the lighting apparatus, and outlet vents mounted distant from the ceiling. The ventilation system is operable to introduce ventilating gas into the spray booth adjacent the lighting apparatus, and to urge ventilating gas introduced adjacent the lighting apparatus to move toward the outlet vents. In a further feature, the ventilation system includes vents mounted between the first and second lighting apparatus.

Please replace the paragraph beginning on page 5, line 15 with the following two amended paragraphs (which consist of the aforementioned paragraph amended and separated into two paragraphs):

In yet a further feature, the first and second lighting assemblies have respective lengthwise centerlines. The lengthwise centerlines are spaced apart a distance greater than the width of the footprint. In still yet a further feature, the first and second lighting assemblies are symmetrically mounted relative to the footprint.

In a still ~~yet a~~ further ~~feature,~~ aspect of the invention, there is a spray booth having walls and a ceiling extending therebetween, and has lighting apparatus including at least a first lighting assembly and a second lighting assembly. The first and second lighting assemblies are located adjacent the ceiling and spaced inwardly of the walls. The lighting assemblies are convergently oriented. When viewed in a cross-section across the spray booth, the first lighting apparatus emits light at a maximum intensity along a first vector ~~when viewed in a cross section across the spray booth~~. The second lighting apparatus emits light at a maximum intensity along a second vector, and the first and second vectors intersect. In still another feature, the vectors intersect at a height greater than floor level.

Please replace the paragraph beginning on page 7, line 20 with the following amended paragraph:

Spray booth **20** may be built to accommodate objects of varying sizes for coating. For coating smaller objects, a reduced-sized booth may be built. For coating larger objects such as a truck, aircraft or rail road rolling stock, a larger booth may be more desirable. Spray booth **20** may be used for applying paint, or may be a spray booth for applying other types of sprayed coatings. In the business of surface coatings for transportation equipment such as aircraft, rail road rolling stock, and most especially automobiles, a booth such as spray booth **20**, may be provided in a modular form. That is, side walls **36**, **38** ~~any~~ are assembled from a number of pre-fabricated wall panels, **48**, of uniform construction that mate together to form a wall, or that can be mounted to surmount each other to

form an enclosure of double or triple height. Where a longer bay is required, additional panels **48** may be added. That is, where, for example, a standard one unit bay may have a length equal to about 24 ft, being the width of 8 wall panels of 3 feet width, an extended length booth may have a length of 27 ft or 30 ft, and so on, as the next increments. In the case of a drive-through, or high production volume paint booth, three "single" booths 24 ft long may be joined end-to-end to make a 72 ft booth with doors at each end. Many combinations are possible. Other prefabricated door panels, such as panel **50**, may include pre-fabricated, reasonably well-sealed door **46**. End walls, such as rear wall **34**, may also be made of a plurality of pre-fabricated wall panels of a uniform width, combined to give, in one embodiment, an internal width of about 14 or 15 feet. Similarly, doors **44** may be pre-fabricated, reasonably tight-sealing folding doors. It may be noted that walls **34**, **36**, **38** and roof structure **28** may be "single skin" (i.e., uninsulated) or double skin (i.e., insulated) panels and may be of constant through-thickness. The insulated panels may tend to be employed where curing with the assistance of a heating element is employed. Booth **22** may be erected outside, or it may be erected inside, or on the margin of, a larger building, such as a manufacturing bay of a larger factory, or a paint bay of a repair facility, and so on. Some of the panels of side wall **36** may be of a shorter length than their neighbours, to yield, when assembled, a rectangular cut-out, or port, indicated generally as **52**, for accommodating ducting of a ventilation system, **140**, more fully described below.

Please replace the paragraph beginning on page 9, line 17 with the following amended paragraph:

Where booth **20** is of modest length, such as 24 ft, a single intermediate ceiling reinforcement cross beam **84** may be employed, with 12 ft sections of longitudinal filter and light framing being supported between the front and rear end walls **32**, **34** and cross beam **84**, respectively. For longer spray booths, more cross-beams **84** may be used, on relatively equal spacing, as may be suitable. Cross-beam **84** may have an upper compression member, a lower, tension member, and gussets or other shear transfer elements. Upstanding vertical posts or column members may be mounted beneath the ends of cross beam **84** to carry vertical loads into base **24**. Roofing, such as may also be formed from a plurality of assembled parallel pre-fabricated panels ~~52~~ **106**, overlie the upper margins of the side wall and front and rear wall panels and the upper, or compression, member of beam (or beams, as may be) **84**, forming a sealed structure.

Please replace the paragraph beginning on page 10, line 4 with the following amended paragraph:

As shown in part in Figure **1a**, roof structure **28** includes an array of prefabricated roof panels **106**, laid side by side and supported by the peripheral rails ~~105, 107~~ **58, 62, 72** mounted along the upper margins of walls **32**, **34**, **36**, and **38**, and the upper cross member of cross beam **84** to cover completely the periphery of wall section **26**. Roof panels **106** are joined together to form a sealed structure.

Please replace the paragraph beginning on page 11, line 19 with the following amended paragraph:

When viewed from above or below, overhead lighting assembly **92** or **94** has a generally narrow rectangular shape, having two long sides, namely the outboard edge ~~246~~ and the inboard edge, and two short ends. Overhead lighting assembly **92** or **94** is oriented such that its long sides are substantially horizontal and parallel with side walls **36**, or **38** (as may be). Its outer edge is positioned lower than inner edge in its installed position. As such, overhead lighting assembly **92, 94** is oriented at an oblique angle α relative to the horizontal plane **H** (see Figure **3**). At the short end of overhead lighting assembly **92** or **94**, a region adjacent the inner edge may be joined to plenum center beam **84** or plenum end beam **82**. A region adjacent the outer edge may be joined to plenum center beam ~~89~~ **84** or plenum end beam **82** through hanger **108**.

Please replace the paragraph beginning on page 11, line 28 with the following amended paragraph:

Longitudinally running lighting assemblies **92**, **94** such as may have a generally flat configuration when viewed from above may include formed web sections **119** and longitudinally periodically spaced formed backshells **120** for accommodating illumination element arrays. Web sections **119** have inboard and outboard margins formed into flanges **110**, **116** of complex shape for engaging the adjacent inboard filter element array **104** and outboard filter element arrays ~~106~~ **100, 102**. That is, the outboard flange **110** may have a downwardly extending leg **121** that is folded back on itself, and a horizontal leg that extends distally to terminate at an upturned lip **123**. The double

folded, downwardly extending **121** leg then may form the side of a door jamb, against which to engage a latch of the hinged filter frame. The distal, horizontal leg may provide a land **125** against which the filter frame **86** or **88**, may be permanently mated, and against which the filter carrier **112** may seat and latch in place. Inbound flange **116** may be similar, but angled to mate with inbound filter frame **114**. Web sections **119** also have openings **127** formed in them, such as may be formed by stamping, and such as may be generally rectangular to correspond to the footprint of periodically spaced backshells **120**. Backshells **120** may have a back portion **122** that may have a truncated rectangular inverted flat-bottomed trough shape, which seats on web sheet **119**, centered on an opening **127**. Electrical sockets may be mounted in backshell **120** for accommodating illumination elements. This channel section may be relatively deep, and may tend to function as a support beam running longitudinally between the front wall **32**, and central cross beam **84**; and between rear wall **34** and central cross beam **84**. Lighting assemblies **92**, **94** may also have longitudinally running back covers **128** mounted to web section **119** overspanning back shells **120**.

Please replace the paragraph beginning on page 13, line 1 with the following amended paragraph:

Spray booth **20** has a vertical centre plane indicated by the symbol **CL** that is centred between side walls **36, 38**. Overhead light panels assemblies **92** and **94** may be positioned symmetrically about this vertical centre plane. As both overhead light panels assemblies **92, 94** are oriented, or angled toward this vertical centre plan **CL**, the light emitted may tend

to converge towards the vertical centre plane. Vehicle **42**, when positioned in spray chamber **30**, preferably has its centre line generally lying in or adjacent to the vertical centre plane. In one embodiment, base **24** of spray booth **20** may have a footprint ~~131~~ or footprint region, defining a pathway for vehicles to be sprayed. The ~~F~~footprint ~~131~~ may straddle exhaust pit **166** described below, and, in the case of automobiles may define a path about 4ft to 8ft wide, located symmetrically about the centre plane **CL**.

Please replace the paragraph beginning on page 13, line 22 with the following amended paragraph:

In operation, lighting assemblies **92**, **94** may tend to emit a flux of light through cover member **132**. The intensity í of this flux, may tend to vary across cover **132** as a function of angle, symbolised by angle θ, measured from the longitudinal axial centreline of cover **132**. The direction of greatest flux, as a function of θ, and symbolized by the function í **(θ, r)**, may tend to be in a direction generally normal, (i.e., perpendicular) to the outer surface of cover **132**. The direction of the light flux emission of greatest intensity of the opposed left and right hand lighting assemblies **92**, **94** (running along vectors lying at angle θ, relative to the vertical) converge. That is to say, assemblies **92**, **94** are oriented to ~~the~~ be convergent light sources. The relationship of flux to variable **r**, namely the radial distance in the θ direction, may tend to be inverse such that as **r** increases the flux may tend to decrease.

Please replace the paragraph beginning on page 14, line 27 with the following amended paragraph:

Ventilation system **140** also includes air inlet plenum, **154**, connected in fluid communication with, and fed by, blower **142**. An array of filtering media, namely elements **90** and **98**, may be provided as described above to encourage exclusion of dust dirt, and other particulate matter whose presence may not be advantageous in achieving a desired high quality finish external coating. Inlet ducting ~~153~~ **156** may typically end at an expanding fluid flow conduit, such as diffuser member **152**, in which the cross sectional area of the inlet flow may tend to increase, while the inlet flow velocity may tend to decrease. Inlet plenum **154** may have a plurality of outlets namely through the elements **90** and **98** of the filter arrays (and may, therefore, quite properly be considered to be an inlet manifold). Those outlets give onto the interior of paint booth **20** more generally, as discussed more fully below.

Please replace the paragraph beginning on page 16, line 11 with the following amended paragraph:

When the outlet damper ~~177~~ used in the pressure differential control apparatus is moved to a closed position, blower **142** may tend to draw from recirculation line **174**, rather than inlet ducting **144**. In all cases, assuming leakage through the walls of booth **20** to be quite small relative to the overall flows, the flow rate out through exhaust ducting **170** is roughly equal to the inflow rate through inlet duct **144**.

Please replace the paragraph beginning on page 16, line 15 with the following amended paragraph:

During painting, the damper ~~177~~ used in the pressure differential control apparatus (and damper **176** if employed) is (or are) in a fully open position, and hence inlet duct ~~142~~ **144** is wide open. Damper **178** (if employed) is closed, such that there is no recirculation flow. Even if damper **178** is not employed, extraction by blower ~~173~~ used to draw air along ducting 170 may tend to draw off as much air as is introduced at the inlet duct, thus tending to yield little or no flow through the recirculation system. During curing, there is no paint spray to be drawn into the recirculation system (and hence into blower **142**), so the damper ~~177~~ used in the pressure differential control apparatus may be moved to an intermediate position, such as 90 % closed, and damper **178** (if employed) moves, (or is moved, if actively controlled) to a fully open position such that the airflow through blower **142** may be about 90 % recirc and 10 % fresh. To the extent that inlet blower **142** is operating, and the outlet is choked by the damper ~~177~~ used in the pressure differential control apparatus, air may tend to be recirculated through the recirculation system, yielding a ratio of fresh air to recirc air. Varying the positions of the damper ~~177~~ used in the pressure differential control apparatus to intermediate positions may permit this ratio to be altered as may be suitable, possibly in the range of 1 recirc: 1 fresh to 20 recirc: 1 fresh. During curing, heater element **150** may be used to heat the air as it circulates, and thereby to accelerate curing. Heater element **150** may also be used during painting partially to warm fresh inlet air to room temperature (roughly 70 - 75 F). Damper **176** may tend to be employed where there is

high resistance in the exhaust system, and balancing is required.

Please replace the paragraph beginning on page 19, line 8 with the following amended paragraph:

The overall filter array flowrates are the product of the flow through a unit of area of the array (be it outboard or inboard) multiplied by the area of the array (be it outboard or inboard). The relative proportions of the flow directed through the outboard filter element arrays **100** and **102**, as compared to the central array **104** may be varied by varying the flow resistance (or, inversely, the flow permeability) of the filter elements. This variation may ~~by~~ be uniform over one or another of the arrays, or it may be non-uniform, with some regions of filter elements being more resistive than others, and it may be in a pattern e.g., a checkerboard pattern of alternating high resistance and low resistance elements.

Please replace the paragraph beginning on page 19, line 16 with the following amended paragraph:

A cross-section of a filter is shown in Figure **3**. The filter element (be it **90** or **98**) may include ~~includes~~ a scrim ~~190~~, which may be in the nature of a mesh, be it composite or metal, that extends across, and spans, the framing members **86, 88** of the filter element, ~~indicated generically as 192,~~ and supports ~~the~~ a loft ~~194~~ and provides a measure of stiffness to the filter. The ~~L~~loft ~~194~~ is made of a porous material that permits air to leak through, the flow varying with the pressure differential ΔP across the filter element.

Please replace the paragraph beginning on page 19, line 22 with the following amended paragraph:

The ~~L~~loft ~~194~~ may be fabricated from a woven polyester material for entrapping dust and other undesirable particulate matter. The loft may be treated with chemical additives that may tend to bond to captured dust and other particles, such that it may tend not to release the particulate matter. The filter medium, (or media) in elements **90** and **98** may be of a fineness to capture particulates of 8 microns or greater in diameter. Particulates above 10 microns in diameter may tend to be visible if captured in the coating.

Please replace the paragraph beginning on page 20, line 1 with the following amended paragraph:

The resistance (or, alternatively and inversely, permeability) of the loft ~~194~~ may be altered by increasing the thickness of the layer of lofting material. Alternatively, it may be altered not only by adding another layer of material, but also by employing for that layer (or in yet another additional layer) a low permeability material (or, alternatively put, a high resistance material) that has been knit or otherwise added to the loft. The filter element may thus be divided into distinct zones or strata, the interface between the strata being symbolised by dashed lines. To the extent that array **100** or **102** may have a greater proportion (or lesser proportion) of low permeability material than central filter element array **104**, the relative resistance of the arrays may be adjusted to achieve an overall flowrate falling within the ranges notes above. Alternatively, the low permeability material may be mixed in with the more usual material, to give a relatively homogenous

matrix of higher than usual resistance to airflow. The difference in specific permeability (that is, the resistance of a unit of area of filter, e.g., 1 sq. ft.) may be such as to reduce the flowrate through the filtering medium (or layers of media, as the case may be) by 30 to 75 % or 20 to 60 % as compared to a known standard. Alternatively, the scrim may be constructed with a wider mesh or holes in the mesh to lessen the resistance to airflow of the filter element. Another means of varying the resistance of the filter elements is to cover portions of the elements with plates such as may be largely, if not entirely, impervious to the passage of air.

Please replace the paragraph beginning on page 21, line 13 with the following amended paragraph:

Alternatively, side light panels **198** may be provided on side walls **36, 38**. A single side lighting assembly **198** may be provided near the central area of side walls ~~116~~ **36**, for example, under plenum centre beam **84**. For better lighting, more side lighting assemblies **198** may be provided on either or both sides of plenum centre beam **84**, depending on the length of the object to be painted. These side lighting assemblies **198** may have a similar construction to that of overhead lighting assemblies **92**, **94**. They may be placed vertically, i.e., with their long sides aligned in a vertical direction. They may be conveniently positioned at a height generally slightly higher than vehicle **42** to be painted. Typically, the bottom edge of side lighting assembly may be is at least 18 in. above the floor. Multiple rows of side lighting assemblies **198** at different heights may also be provided.

Please replace the paragraph beginning on page 22, line 27 with the following amended paragraph:

It may be noted that although ventilation system **140** may be mounted to feed inlet plenum **154** from the side (through cut out **52** of wall **36**, for example), it may also be mounted to feed plenum **154** from the end, through a cut-out similar to cut out ~~1~~**52** formed in the region of the upper margin of end wall **34**.